ATARI

Consumer Product Service
Manager of Technical Support

UPGRADE BULLETIN

UB
VCS
number 01

MODEL: Atari CX5200 Supergame (PCB CA018087)	DATE: July 7, 1983

SUBJECT:

PCB Retrofit to allow use of Atari VCS™ Cartridge Adaptor

UPGRADE DESCRIPTION:

Applies only to CX5200 PCB, P/N CA018087. Allows use of the new Atari VCS Cartridge Adaptor (CX55). All other CX5200 PCB's have the retrofit components built into them and require no modification to accommodate the adaptor.

INSTALLATION PROCEDURE:

Use attached retrofit procedure.

TESTING PROCEDURE:

As outlined in retrofit procedure.

DIFFICULTY REPORTING:

If you have questions or need further assistance, call the Atari Techline Specialist.

Inside California
(800) 672-1466

Outside California
(800) 538-1535

VCS CARTRIDGE ADAPTOR PCB

RETROFIT PROCEDURE

1. Remove the top cover of the CX5200.

2. Verify that the PCB Part Number is CA018087. (If it is not this number, there is no need for the modification. Reinstall cover, insert adaptor, go to step 13 and test.)

3. Remove both the top and bottom PCB shields.

4. Using either an X-ACTO knife or a Dremel tool (150 Bit), isolate Pin 24 of J1 from ground by making a "V" or "U" shaped cut in the trace on the component side of the PCB (See Figure 1). Be careful not to isolate Pins 23 and 25 from ground.

   IT IS EXTREMELY IMPORTANT THAT PIN 24 OF J1 BE COMPLETELY ISOLATED FROM GROUND.

   Use an Ohm Meter to verify that Pin 24 has been isolated from ground.

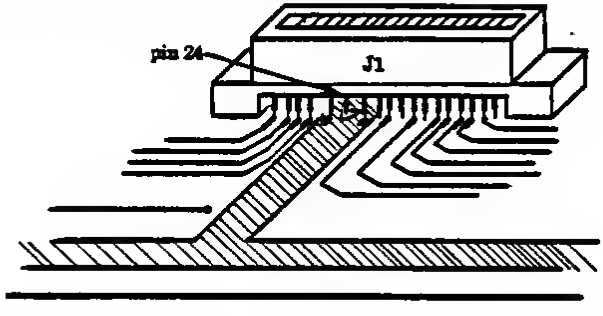


Figure 1. Pin 24 Isolation.

5. If the kit has not already been pre-formed (see Figure 2), use needle-nosed pliers and wire cutters to pre-form the kit. Use Figure 2 as a reference.

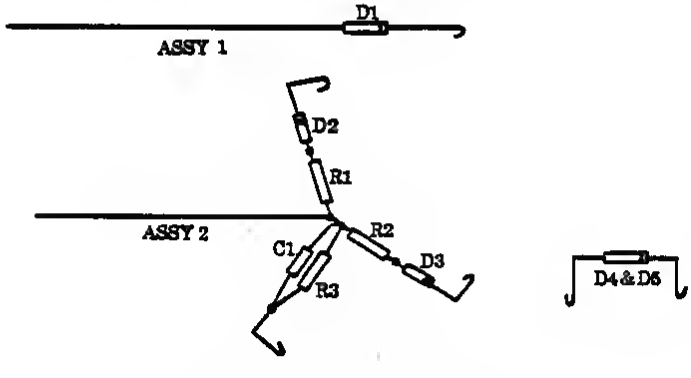


Figure 2. Pre-form Assembly

6. Using Figure 3 as a reference perform the following:

A. Solder cathode of D1, Assembly 1 to R26.
B. Pass Assembly 1 wire, (BLACK) through hole in J1.
C. Solder cathode of D4, to C13.
D. Solder anode of D4, to C14.
E. Solder D5 to R10 (Note polarity).
F. Solder cathode of D2, Assembly 2 to C10.
G. Solder cathode of D3, Assembly 2 to R11.
H. Solder R3, and C1, Assembly 2 to R12.
I. Pass Assembly 2 wire (GREEN) through hole in J1.
J. Solder one end of RED jumper wire to L8.
K. Pass RED jumper wire through hole in J1.

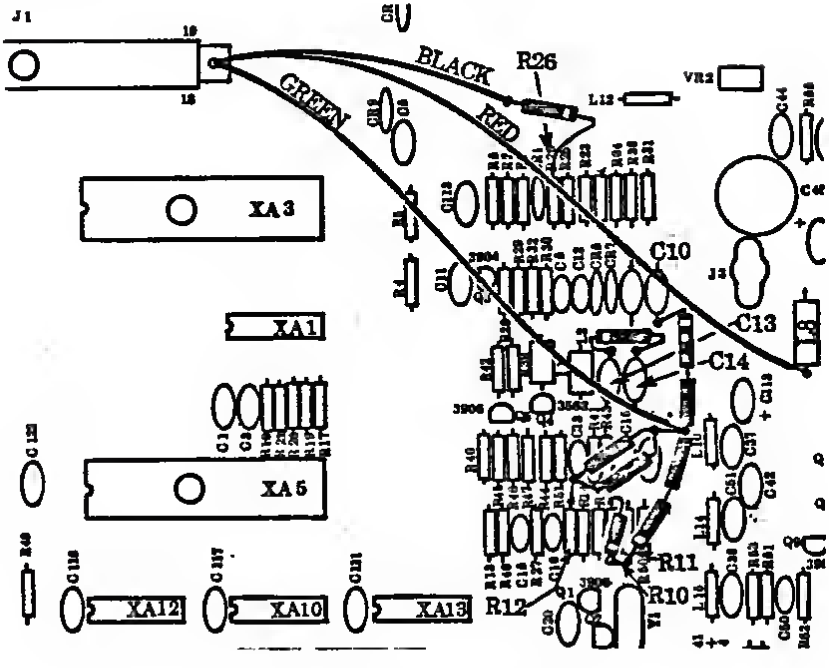


Figure 3. Retrofit Diagram.

7. Using Figure 4 as a reference, perform the following:

   A. Solder Assembly 1 wire (BLACK) to Pin 24 of J1.
   B. Solder Assembly 2 wire (GREEN) to Pin 30 of J1.
   C. *Solder RED jumper wire to Pin 11 of J1.

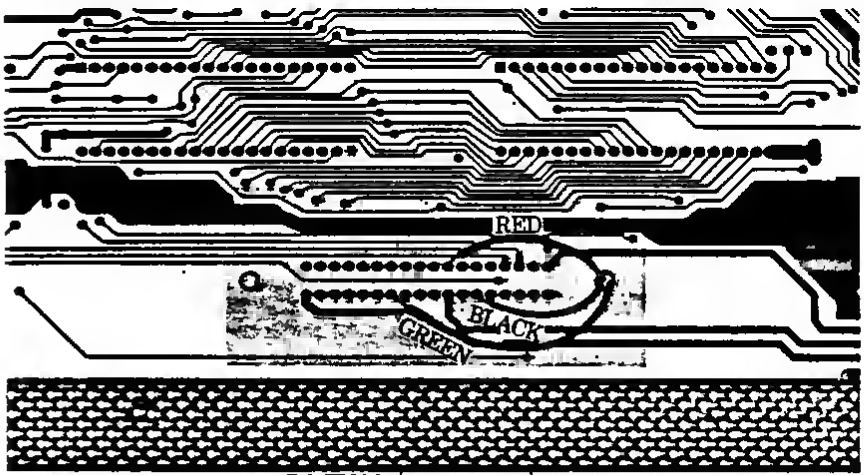
NOTE: Be sure to leave enough slack in the wires to allow reassembly of the shield.

**************************CAUTION***************************

After soldering, use an Ohm Meter to make sure that no solder bridges or shorts were formed adjacent to Pins 11, 24, and/or 30 of J1.

**************************CAUTION***************************

*** = Take extra care to avoid connecting the RED wire to any ground pins. If the RED wire is grounded, the 5200 Power Adaptor will burn out.**



BOTTOM (Solder Side) OF PCB

Figure 4. Wire Connection Diagram.

8. Place the top housing face down on the workbench.

9. Using needle-nosed pliers, grasp the pin indicated in Figure 5, and twist it off.

10. Before reassembling the unit, place the PCB into the bottom housing and replace the top housing. DO NOT SECURE HOUSINGS.

11. Using the 1.1 Diagnostic Cartridge perform a quick check to ensure that the modifications did not affect the performance of the unit. If the unit fails, return to the modification procedures, and make certain that all steps were fully and completely performed. The modifications will not affect game play or the unit's performance.

12. Turn off the unit.

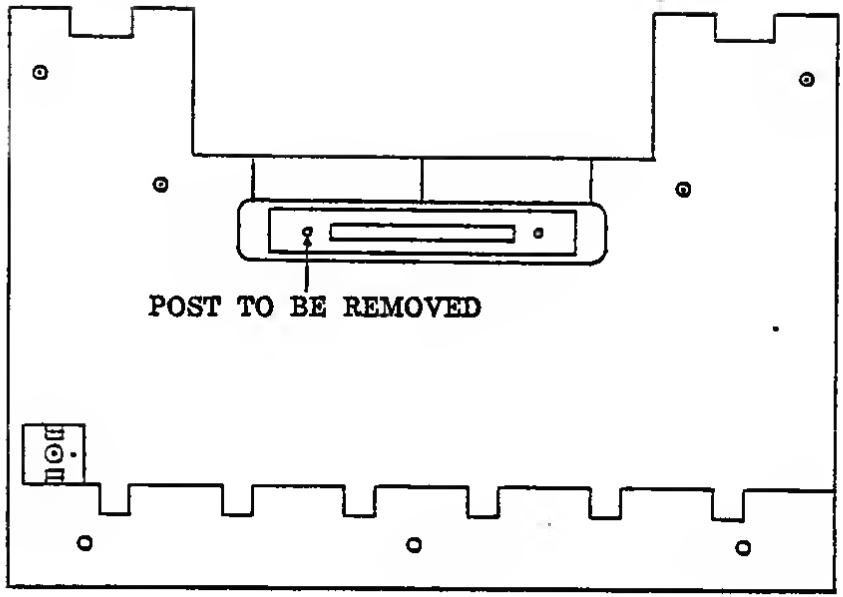


Figure 5. Top Cover Pin Removal

13. Remove the Diagnostic Cartridge and install the Cartridge Adaptor.

14. Use the 2.6 Diagnostic Cartridge to perform a quick check to ensure that the adaptor is functional.

15. If the adaptor does not function properly, step through the modification procedures to ensure that all modifications were completely and correctly performed.

16. If all modifications were installed correctly and the Cartridge Adaptor does not function properly, use a DVM to determine which retrofit component or assembly is defective.

17. Replace the defective component or assembly.

18. Completely reassemble the unit, using the screws removed in Step 1 to secure the two housings together.